THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 36. **BALTIMORE, MD. JAN. 1, 1839.** **Vol. V.**

☞ This publication is the *successor* of the late
AMERICAN FARMER
and is published at the office, a· the *N. W. corner o Baltimore and North streets, over the Patriot office*, at TWO DOLLARS AND FIFTY CENTS *per annum*, if paid within one month from the time of subscribing, or $3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, JAN. 1, 1839.

ROBERTS' SILK MANUAL.

This work is now ready for delivery. Persons desirous of obtaining copies of it will do well to make early application, as a large number of the edition is already engaged.

Price per single copy, 37½ cts.—to dealers who take 100 copies or more, a deduction of 33⅓ per cent. discount will be made; to those who take a less number, 20 per ct. will be allowed—terms, *cash*.—It contains 100 large octavo pages.

The friends of the Silk Culture in *Maryland*, will bear in mind that a *State Convention* is to be held in the city of Annapolis on the 15th day of January instant. As it is particularly desirable that each county in the state should be represented, those who may be solicitous to advance the interests of the cause, will take prompt and efficient measures to appoint delegates. There is no state in the union possessing a better climate or soil for the culture, nor is there one whose necessities more imperiously call for its adoption, and we therefore, sincerely hope, that our farmers and planters will, upon this occasion, come to the rescue with zeal and patriotism, and set an example worthy of the descendants of those sires of revolutionary memory, who in the battle field contended while it was a virtue to continue the fight, and who, when they retreated, did so facing the enemy.

TOWN'S SPELLING BOOK.

A new work bearing the above title has been placed upon our table, and in looking through it we have been very forcibly struck with its merits. The arrangement of the words into syllables are peculiarly happy, conforming as nearly as can be to the most approved method of pronunciation; and the syllables being so marked as to designate the one on which the accent should be placed, renders the task of enunciation easy to the learner. There is another characteristic about the book that pleases us. The *meaning* of the words to be spelt by the children, are given in parallel columns, so that they not only learn how to spell them, but at the same time acquire a knowledge of their import, so far as it is practicable at the tender years of most learners. This we think a decided improvement upon the plan of most all the primary school books, as it not only teaches how to spell words, but imparts at the same time their meaning; and thus is a valuable idea impressed upon the child's mind at a time when impressions are most apt to be lasting. If common sense had not taught us the value of this part of Mr. Town's plan, the importunity of our youngest son to know the meaning of the words which we give out to him while hearing him his lesson, would have done so; for though we often devote hours to Johnson's folio dictionary, in studying the various bearings of *words*, we confess he has often put us to our trumps, to define those he was spelling in such a way as to make them intelligible to his youthful mind; and whenever difficulties occurred, and we would wish to evade his questions, he would invariably bring us back to a proper sense of our position, and to the reasonableness of his inquiries, by an exclamation of, "Oh! father what's the use of knowing how to spell without knowing the meaning of the words?"—This was a *poser*, which no argument of our's, had we been disposed to use one, could have overcome: it attacked our pride, while it pointed out our duty, and coming from a little fellow, whose consanguinity gave him a right to be gratified, we hammer away from "*absence*" down to the end of the column, and are glad enough in all conscience when his last interrogatory for the night falls upon our ears; for though one may, in his *own mind*, have ever so just a notion of the *import* of a word, it is not so easy a matter to transfer it to that of a child six years of age, in a language that he can understand. So for one, in the inmost core of our heart, we thank Mr. *Town* for putting this *stopper* upon the inquiries of our little urchin; for verily he has got us out of a most annoying scrape.

Proceedings of the Silk Convention—We have been requested to ask the favor of the editors with whom we exchange to copy the proceedings of the Silk Convention published in our paper of the 18th ult.

LIME AS A MANURE FOR POTATOES.

It is said in many of the English authorities, that lime is an improper substance to be used as manure for potatoes; that owing to the thinness of the skin of this root, it causes it to *blister*, and consequently interferes with its growth. That *hot* lime, fresh and unslaked from the kilns, placed in large quantity upon the tuber, would from its caustic nature, produce this effect, we do not doubt; but we have always repudiated the idea, that lime, as generally used on land in this country, could exercise an injurious consequence to the growth of potatoes. How is it possible that 50, 100, or 150 bushels of lime spread ove the surface of an acre of ground, and harrowed lightly in, can by contact, after passing through the operation of slaking by air and water, as it necessarily must, in its descent to the potatoes, produce any such effect? The thing is absurd in itself. We all know, that by analysis, it requires six hundred times its own weight of water to hold lime in solution, and common sense teaches us, that the quantity of lime, which is thus separated from the *mass* spread on the earth, and which finds its way downwards to the growing roots, are so mingled with earthy and dead vegetable matter as to be rendered harmless. And hence the only rational supposition is, that its action when it does reach them, will be merely stimulative to the dead vegetable matter, and serve to convert it into nutriment for the living plants. Potatoes, we all know, require a large amount of undecomposed manure, to make them grow vigorously and yield abundantly; that from the rankness and succulence of the vines they require a continuous supply of nourishing food. That being the case, it follows, of course, that the *raw material*, which is generally used as manure for potatoes, will be improved by the addition of some body calculated to excite its decomposition, and convert it into a condition capable of yielding the nutriment so indispensable to the healthful growth of the potato. This opinion, after much reflection, we formed, long since, and acting upon it last season, were gratified to find that, although our patch of potatoes proved almost a failure, that that part of the ground which had been *limed*, in addition to manuring, (which was alike in all parts) yielded more and better potatoes than the other portion

where the lime had been used; that the vines kept green longer, and as well as the tubers, attained a larger size. Our own experience then, has convinced us, that the idea, that the lime is an improper substance to be used on ground whereon potatoes are grown, is by no means a sound one, and we are happy to find that we are sustained in our views by Mr. *John Ide*, an intelligent farmer of the state of Vermont. He says in a letter to the editor of the Vermont Telegraph:

"Respecting the use of lime in raising potatoes I can make no accurate statement—as I was not at home when my workmen commenced digging those that were limed; but as near as I can calculate, I obtained something like 100 bushels more for making use of about six bushels of *slaked* lime, in the following manner. I had about half a pint of lime placed in the hill, and had the potatoes pressed down gently with the feet before covering. I was led to try the experiment by seeing the effect produced by some lime that had been used in a tannery, being put into the hills of some potatoes."

New-Year's Day—This being the beginning of a new year, we tender to our subscribers the compliments of the season, and trust in the fullness of our hearts that they may live to enjoy many returns of the season, and that they may never come without finding them in the possession of health, happiness and prosperity. May good and fruitful crops crown their labors, and every revolving year find them in the enjoyment of those grateful feelings towards that kind Providence, who watches over the destinies of man, which render him worthy of earthly blessings, and prepare him for a state of eternal life.

While the farmer and planter pours out his gratitude to the Author of all perfect good for crowning his labors with success, let him not forget that kindness to his domestic animals is as much his duty as its performance will prove his interest—that in proportion to his attention in feeding them well and keeping them warm will they increase in value.

SUGAR BEET FOR MILCH COWS.

An intelligent gentleman from the eastward, assured us a few days ago, that by giving his cows a peck of sugar beet twice a day, cut up with their hay, he was enabled to get just as rich milk and butter during the winter, as in summer, when the pasture was at its best. Now as an acre of ground well manured, planted in this root, and well attended, would yield beets enough to keep *ten cows* from the 1st of November till the 1st of May, should not every farmer make his arrangements for planting beets next spring. From our own experience, we have no doubt, that this addition of beets to the ordinary feed of the cows, would make a weekly difference of 2 lbs. each in their product of butter. From the 1st of November to the 1st of May, there are 26 weeks. This number of weeks at 2 lbs. additional butter, would give us 52 lbs. for each cow during the period named, or 520 lbs. for the 10 cows, and if we set down the butter as being worth 25 cents per lb., it will give us $130 as the value of additional yield brought about by the feeding with the product of an acre in beets. But this is not all,—the proprietor of the cows, in the spring, would have the gratification to know that he had treated his animals well, and the satisfaction of seeing them in good condition.

REMEDY FOR SWELLINGS OR SNARLED BAGS IN COWS.

Cows soon after calving are subject to have swellings or knots in their udders; this is more particularly the case with heifers with their first calves. It sometimes proceeds from colds contracted prior to calving, and at others from the inability of the calf to extract all the milk, which throws the cow into a feverish condition, and the formation of indurated surfaces consequently follows. Should fever accompany these lumps, a little cooling medicines will be proper, as a solution of half a pound of *epsom* or *glauber salts* in a drench; to be followed with good nourishing messes, say one peck of bran and half a pound of linseed meal, to be first boiled and given warm, morning and night, for a few days. To reduce the swelling in the udder the following recipe will be found excellent:

Take a handful of *rue*, and the same quantity of the seed of *wormseed*, bruise them both well, and put them into a skillet or other vessel, with a pound of unsalted butter, fresh from the churn; simmer the whole well over a slow fire for an hour; then strain the mixture through a sieve, or linen cloth, and you have the best ointment that can be applied. Let the inflamed and hardened parts be gently anointed three times a day with the hand, and in a few days the cure will be effected, if this remedy is applied in time.

Care should always be taken before the calf is turned to the cow, for several days after she has calved, to let the *dairy-woman* draw off a portion of the milk; by so doing you are sure that the calf will extract the rest; by thus *emptying* the cow's udder, you will prevent the ill consequences which ensue where a part of the milk is left in the bag, to produce fever and snarls.

Hollow Horn.—This disease in cows, may be prevented, by putting, once a fortnight, during the inclement weather of winter and spring, a teaspoonful of spirits of turpentine in the cup or cavity just behind the horns.

A surer preventive, however, and one more consonant with the feelings of humanity, is this—*feed them well, and keep them warm.* Cows that are well kept and housed, do not have this disease.

From the American Silk Grower.

SILK CULTURE.

Having fed a small number of silk worms the past season, and having, as I suppose, succeeded well, I send you a brief account of my fixtures, feeding, &c. If you think my experience will in the least degree aid the good cause in which we are in common engaged, you are at liberty to publish it. My cocoonery is 36 feet by 18; two stories high, lathed and plastered, with a chimney in each end, and a cellar under the whole. The building is substantial and well furnished. It has 28 windows and 5 doors, with blinds and Venitian shutters. The building was intended to be converted into a dwelling in case it was not used as a cocoonery.

Two rows of shelves, the whole length of the building, were put up, each shelf one foot above the other, so that I had large aisles between the rows of shelves, and around them, affording ample room for feeding the worms and changing the hurdles. My hurdles are three by four feet, made with cotton twine, knit, but crossed as a bed cord. I supposed I had accommodations for feeding 2 or 300,000 worms hatched in succession. I accordingly procured two ounces mammoth white eggs, from Mr. Stone, of Burlington, which were understood to come from Germantown, Pa., and several ounces of sulphur colored, from Mr. Comstock, of Hartford. These were all put in glass jars, and placed in the ice house about the 1st of April.

The 15th of June, the mammoth white were taken out and exposed for hatching, and in a few days, about 5250 of them hatched, which was all I obtained from the two ounces. I then exposed those I obtained from Hartford, not one of which hatched. Disappointed in my eggs, I called on Mr. A. M. Jerome, of Princeton, who supplied me with eggs which were in the process of hatching. These I brought home on the 26th of June, and about 25,000 of them hatched. I had then altogether about 30,250 worms. I placed them all on the shelves in the second story; about 13,000 on one side of the room, and the balance on the other side. I fed the whole on the multicaulis, grown from roots and cuttings planted this spring. During the whole time of feeding, the temperature ranged very high, being several days as high as 93 degrees Fahrenheit, and seldom less than 73 degrees.

When I commenced, all the knowledge I had on the whole subject was "book knowledge." I had never seen a cocoonery, and never but once had seen worms feeding. My colored man, who had never seen worms, gathered the leaves and fed the worms until within about two weeks of wind-

ing, when I employed an aged man to assist him. —Having some leisure, I spent considerable time in the cocoonery, determined to watch the feeding with care. A premium of $100 having been offered by the Monmouth Silk Manufacturing Company, to the person who would raise the greatest number of pounds of cocoons from the sixteenth of an acre, I measured the above quantity of land, and planted it with roots set upright, the rows eighteen inches apart, and the trees eight inches apart in the rows. The 12,000 worms above alluded to I fed on the premium trees. The drought continuing so severe, and fearing the leaves on the premium trees would fail, on the 19th of July I took off about 5000, for which I borrowed leaves to carry them through. From this time it required 143 pounds of leaves.

In about twenty-six days the mammoth white began to rise, and in about 31 days all, or nearly all, had risen. On the 28th day a few of the sulphur began to wind, and by the 35th day, all had wound. As a general rule we fed four times a day, never at night. After the second week we changed the hurdles every two or three days; the room was well ventilated, and always sweet and clean,—although good attention was given to all the worms, yet a little more attention was given by myself to the premium worms. They were fed just as often as they consumed the leaves previously given, and the difference in the size of the cocoons was obvious, the premium cocoons being very perceptibly the largest and most firm. The whole number of pounds of cocoons from the worms fed as above, was 86 lbs. 9 oz ; the whole number of pounds fed on the premium trees was 38, or if an allowance is made for borrowed leaves, allowing 21 pounds of leaves to a pound of cocoons, the number fed on premium trees would be 31 pounds, 14 oz. Of the mammoth white it required 350 cocoons to make a pound; of the premium sulphur cocoons 290 to 300; 192 of the largest, after the floss was taken off, made a pound; of sulphur colored cocoons, not premium, it required about 325 to make a pound. The worms were vigorous and healthy during the whole time of feeding. I think remarkably so; indeed I do not know that I lost a single worm by disease. Being a healthy crop, I saved most of my cocoons, for eggs, and I have about four pounds of the finest eggs I have ever seen. I stifled, probably, 25 lbs. of cocoons in order to make a specimen of sewing silk.

August 4th, I obtained a small paper of two crop eggs from Wm. Imlay, Esq., of Allentown; only 300 or 400 of them hatched, which I fed on my premium trees. These were also healthy and vigorous, but they did not wind under 30 days, and the cocoons were small. Owing to the impossibility of procuring eggs to hatch in successive crops, I have only raised 31 lbs. 14 oz. from my 1-16th of an acre, though my trees are smaller than yours in Burlington. This, I believe, is not more than one half the amount I could have fed if I had been able to procure eggs and hatch them as wanted. The trees do not appear now to have lost any of their foliage. Enough has been done, however, to show that raising silk is profitable even the first year, in the hands of the most inexperienced. I hope you will write an article on this subject, and from what *has* been done, show what *can* be done. From experience, I am perfectly satisfied there is no mystery or difficulty in feeding the silk worm. If the eggs are from a healthy crop, and if the worms are kept clean and well fed, success is certain, and from the acknowledged enterprise of our people; I am perfectly satisfied the silk business will succeed, and at no distant period will become a source of vast national and individual wealth. May your valuable publication aid, as I have no doubt it will, in hastening this, inducing our intelligent farmers and others to engage in the business.

Yours truly,

R. V. M'LEAN.

Freehold, N. J. Sept. 20, 1838.

From the Yankee Farmer.

QUICK-LIME.

AND OTHER CALCAREOUS SUBSTANCES AS A MANURE.

[We would refer our readers to the former part, as it is necessary to observe the connexion, this part of the section was omitted for want of room.]

When the reservoir was nearly full of this fine powder, the work was stopped, the water was drawn off from the reservoir, by taking out some plugs left for that purpose, at different heights, till all that was clear had run off, the powdered stone was afterwards thrown out to the bank, and allowed to dry sufficiently for use.

I have heard that a mill, upon these principles was erected by the Honorable the Trustees for managing the forfeited estates in Scotland, and that a good deal of lime-stone was pounded with it. But, as it was erected in the Highlands of Scotland, where roads were bad and where there was but little spirit for improvements in agriculture; as there was no public demand for the manure, after the experiment was sufficiently tried to show that it might be practised with advantage in other places, the mill was suffered to lie unemployed.

But although this may be considered as a most valuable discovery for those who may have a good lime quarry so situated as not to be within the reach of any kind of fuel for burning lime-stone; yet, to such as can obtain fuel at a moderate expense, there can be no doubt that burning is the easiest and most efficacious mode of reducing lime-stone to powder that was ever invented, and therefore ought always to be adopted where necessity does not prevent it.

Reducing lime-stone to powder by calcination, is attended with this farther advantage to the farmer, that it considerably diminishes his expense of carriage. *Pure* lime-stone loses about two-thirds of its weight by being thoroughly burned; so that the man who is obliged to drive this manure from a great distance, will find a very considerable saving by driving it in the state of *shells*. But if it were reduced to a powder by mechanical triture, he could not be benefitted by this circumstance.

Many persons choose to drive lime-stone from a considerable distance, and burn it at home: But it is obvious they then subject themselves to a very heavy charge in carriage. which would be avoided by an opposite conduct.—This, therefore, ought never to be practised but where other circumstances may counterbalance this unfavorab one.

But as lime-stone is often in its native state mixed with sand in various proportions; and as sand loses nothing of its weight by calcination, it must happen, that those kinds of lime-stone which contain the largest proportion of sand will lose least in calcination, and of course afford the weightiest lime-shells.

Hence it is obvious, that those who are under the necessity of driving lime from a great distance, ought to be particularly careful to make choice of a kind of lime-stone as free from sand as possible, and to drive it in the state of *shells;* as they will thus obtain an equal quantity of manure, at the least expense of carriage that is possible; and the lightest shells ought, of course, to be always preferred.

When lime is slaked, that which contains most sand *falls* most quickly, and absorbs the smallest proportion of water. What is pure, requires a very large proportion of water, and is much longer before it begins to fall.

Hence it happens, that those who drive sandy lime shells in open carriages, must be very careful to guard against rain; because a heavy shower would make the whole fall, and generate such a heat as to be in danger of setting the carts on fire; whereas *pure* lime-shells are in no danger of being damaged by that circumstance. I have seen a cart loaded with such shells, which had been exposed to a continued shower of rain, as violent as is ever known in this country, for more than three hours, and seemed hardly to be affected by it in the smallest degree. I ought to observe, however, that my experiments were confined to only one kind of pure lime, so that it is not from hence demonstrated, that *all* kinds of pure lime will be possessed of the same qualities.

Lime shells formed from the purest lime-stone, required more than their own weight of water to slake them properly;* whereas some kinds of lime-shells that contain much sand, do not require above one fourth part of that quantity.

Hence it is much worse economy in those who have pure lime-shells, to slake and carry them home in the state of powdered lime, than it is in those who have only a sandy kind of lime-shells.

---

*I have found, by experiment, that pure lime-shells cannot be slaked with less than about one-fourth more than their own weight in water. When slaked in the ordinary way, the same lime shells took more than double their weight of water.

From the Cultivator.

LAKE COUNTY, IA., 6th Oct. 1837.

TO HARVEST BEANS.

The following easy and simple method of saving a crop of beans, is the price of ten years subscription to the Cultivator, to every person that never practised it, who wishes to cultivate that valuable crop. By this method, beans may be planted in a field by themselves, may be pulled while the vines are entirely green; and will be perfectly cured, no matter how wet the weather; and what is more, need not be housed or thrashed until such time as may be convenient. This is the plan.

TO CURE BEANS.

Take poles or stakes (common fence stakes) into your bean field, and set them stiff in the ground, at convenient distances apart, which experience will soon show you, and put a few sticks or stones around for a bottom, and then, as you pull an arm full, take them to the stakes, and lay them around, the roots always to the stake, as high as you can reach, and tie the top course with a string, or little straw, to prevent them from being blown off, and you never will complain again "that you cannot raise beans, because they are so troublesome to save." They are the easiest crop ever raised, to take care of. Try it, and you will then know it, and thank me for telling you of it.

Your friend,
SOLON ROBINSON.

PROGRESS OF PHYSICAL SCIENCE.

TRANSLATED FOR THE JOURNAL OF THE FRANKLIN INSTITUTE, BY J. GRISCOM.

On the part which the Soil acts in the process of Vegetation. Memoir read at the Academy of Sciences, by J. PELLETIER.

(Concluded.)

The merit of a theory is that it accounts for observed facts, enables us to foresee what will take place under particular circumstances likely to happen, and indicates the considerations which it may be desirable to bring about with a view to useful results.

Let us enquire whether the theory now presented fulfils these conditions:

Suppose a chalky soil. To improve it we add argillaceous marl; i. e. to the lime which predominates we add silica and alumina. *To the positive element which we found alone, we add the negative elements which we found deficient.*

Will it here be said that "chalk is so compact that the roots cannot penetrate it, or so split up that water passes through like a riddle, and that the marling is simply designed to change this physical condition."*

But, if the object was merely to divide the chalk, in order to change its physical condition, a calcareous sand would accomplish this object, and yet it never came into the head of an agriculturist to improve his chalk by limestone, while Gordan de Saint-Memin produced a magnificent vegetation by a mixture of chalk with heath sand.

In a piece of ground belonging to Chaptal, the soil was clayey and rather barren; below was a layer of black earth. Chaptal, went to work emphirically, dug up the ground and mixed the two beds together. Contrary to his expectations, the sterility was increased. It was not till the fifth year that the ground acquired a common degree of fertility, that is, when all the iron had passed to the state of peroxide, and the land, black as it was, had become of a deep bright yellow. Chaptal asks, if in this case the black oxide is injurious to vegetation, either by itself, or in reference to the oxygen.

In our theory the fact explains itself, and might have been foreseen:—the black oxides of iron (fer oxidule' d'Haiiy) is a combination of protoxide and sesquioxide of iron, a substance *indifferent* in relation to silica and alumina. Exposed to the air the combination is destroyed, the iron passes to the state of peroxide, susceptible of union with silica and alumina. Yet, under such circumstances it was not worth while to mingle the two beds, since five years were lost in attaining a common degree of fertility.

The theory which we have adopted is applicable likewise, in the happiest manner, to the operation called marling. Marl is not a simple mixture of silica and alumina with more or less of carbonate of lime. Its base is argillaceous and calcareous silicates; some mineralogists consider it even as an oryctognosaical species.* It is on this account that plants cannot vegetate in marl which has not been long exposed to the air, even when the silica, alumina and lime are in the proportions which form good arable land. By exposure to the air, carbonic acid *destroys the combination* which existed between the earths, and it is then, and then only that marl will enrich the soil. In this case, if the negative element prevails, as in the case of argillaceous marls, it becomes excellent for calcareous soils; and marls called calcareous are in their turn advantageous for argillo-sandy land.

It has been remarked that the alkaline and earthy salts, which, in a certain quantity, injure vegetation, produce a good effect when employed in small doses. Chemists and farmers have sought to explain this action of saline compounds. Some have thought that certain salts were good for plants, as some are for animals,—that salts, and even earths, formed part of the food of vegetables; others, on the contrary, that they act principally as stimulants to vegetation. Without denying that earthy substances may enter into the constitution of a vegetable, to unite and give strength to the parts that are to support the organs, like phosphate of lime in the bones of quadrupeds, I may remark, that with a few exceptions, the presence of any salt is not absolutely necessary to vegetation. Thus, for example, borage and lettuce, whose extracts contain much nitre when they grow in highly manured soils, do not contain any sensible portion of it when cultivated without dung. I therefore, rather incline to the opinion of Physiologists, who think with M. Decandolle, that salts act as excitants or stimulants. But, what is the meaning of excitation? At the present day, science no longer admits of those vague explanations which consist of nothing but words. I understand by excitation, the eminent property of conducting electricity which salts communicate to water. It is in this manner, as it appears to me, that nitrate of potash acts, in the prodigious energy which it gives to vegetation. It is probably in this way that sulphate of lime acts—that is to say, by rendering the water a better conductor, though in this case the effects appear to me to be complicated, and to be worthy of direct experiment.

Thus far, for greater simplicity, we have considered lime as free, in speaking of the mixture of silica, alumina, and lime, which constitute a soil; now the lime is in the state of carbonate, but it does not in that state cease to be an electro-positive element in relation to silica and alumina. This circumstance allows us to explain an important vegeto-physiological fact. The carbon in vegetables is produced, mostly, if not entirely, by the decomposition of the carbonic acid which they absorb not only from the air, but from the ground; such is the opinion of the celebrated Decandolle. This carbonic acid, furnished by the ground, appears to enter into the vegetable at the moment of its liberation, probably dissolved in the water which the soil contains. It is absorbed by the spongioles of the radicules; it ascends with the sap, urged forward as by a *vis a tergo*. But how is this carbonic acid produced? In certain manured soils, and in superficial portions of the earth, penetrated by the air, we may conceive it to be formed by the re-action of oxygen upon the carbon of organic detritus; but at those great depths which are attained by the roots of oaks and cedars of a hundred years old, how can the carbonic acid be developed? How can the oxygen and organic matter penetrate to such depths? In our theory there is no difficulty. Carbonic acid comes from the lime, on which the silica and alumina act slowly but continuously to form silicates.*

Thus then, at certain depths, and under influences but little understood, silica would decompose carbonate of lime, while at the surface of the earth, and under the influence of exterior agents, the silicates would be decomposed by carbonic acid produced by the re-action of the oxygen of the air on organic detritus,—an admirable and providential rotation, which re-establishes the equilibrium, and incessantly tends to the rejuvenescence of nature.

The last corollary of my theory,—the decomposition of silicates by exterior agents, and particularly by carbonic acid, cannot be called in question. It has been established by M. Cecquerel, under circumstances in which the force of cohesion might seem to present a serious obstacle. I allude to the decomposition of the feldspar of granite, and the formation of kaolin. The analogy is here so strong that I must render the homage of my first conception to the distinguished academician I have just cited.

The fact of the decomposition of carbonate of lime by silica in the interior of the earth is equally supported by experiment and observation. And first, if, in proceeding to the analysis of a vegetable soil, when the coarser siliceous sand has been removed by weak acids, we examine the finer terrene substance which has resisted the weak acids, we find that it is not alumina, as Chaptal indicates, nor silica, as is stated in various works, but that it consists principally of veritable silicates of lime, of alumina, and of oxide of iron.

Still, it may be objected that these silicates are anterior to all vegetation; that to prove their recent formation and daily production, requires direct experiments. These direct experiments are among the objects which I wish to undertake. They require much time. But to prove truth, are we to depend solely upon new experiments

* G. Diet. d'Agriculture, article *Crete*.

* Brochant's Mineralogy

* Animal manures may contribute to the decomposition of silicates, not only by the carbonic acid which they form by absorbing oxygen from the air, but in producing such substances as the *fat acids*, which have a tendency to unite with lime and to eliminate the silica which is combined with it. M. Raspail, whose talents we are glad to acknowledge, without sharing in all his scientific opinions, appears to us to have explained the siliceous petrefactions that are found in chalk, in a very happy manner by the action of animals entombed in silicco-calcareous beds. (Physiol. Vegetale t. 2, p. 339.)

peculiar to him who advocates it, and are we forbidden to rely on the labours of our predecessors? Certainly not. I may therefore again refer to the interesting researches of M. Becquerel, and bring into view those mineral species which he has formed in his laboratory, and which present all the characters of their natural congeners. Neither can I omit to mention the important fact of the artificial formation of feldspar by Cagnard de Latour.

There is still another objection which may be made to the theory now presented. If in this mixed state, the earth acts by virtue of electrochemical forces, why are three earths requisite to the construction of a good soil? Ought not silica and lime, or lime and alumina to be sufficient to produce, in each element of the mixture, an opposite electricity? It is easy to answer this objection also, by a reliance upon facts well known to mineralogists: it is certain that the binary silicates are more rare in nature than the ternary silicates, and that their mass in particular is less powerful; silica has therefore a greater tendency to combine with lime and alumina together than with either of these earths separately. Hence we may perceive that the union of the three becomes necessary to constitute a soil endowed with the highest degree of vegetative power.

If the ideas which I now submit to the Academy appear to deserve any attention, I propose, on the return of the favorable season to renew the enquiry, and to devote myself to the labour of positive experiment,—experiments, which, whatever may be their results in reference to my theory, will at least have the advantage of eliciting facts which may be friendly to agriculture, that science which is so prominently stamped with the character of utility.

Jour. de Pharmacis.

From the Plymouth Memorial.

WHEAT.

Mr. Printer—Your readers will recollect reading in your paper some time last spring, sundry articles in which the question was fully discussed, "Is it best for the farmers of Massachusetts to sow wheat or plant Indian corn?" Not being satisfied with theory, I resolved to test the question by practice; and falling in with a friend of mine, who seemed to be a little touched with the wheat fever, I agreed with him that he should faithfully try an experiment by cultivating wheat, and I would as faithfully try my luck with Indian corn. The object of troubling you now, is to give the result of both experiments to the public, and let each reader make such comment as shall best suit himself.

On the 5th of May last I commenced ploughing an eight acre field, in addition to my usual ploughing, that the experiment might not interfere with the rest of my farming. I paid cash for all the labor, and gave the current price for my laborers' services. The field had not been ploughed for fifteen years, had never been manured, nor used for and other purpose than raising corn and rye once in eight or ten years, and for pasture when not cultivated. I put no manure on it and planted it in the usual way, making the rows of corn run both ways, about four feet apart, and puting four kernels in a hill. The worms and birds troubled it some and I planted the missing hill with beans, and the result follows:

Dr.—To ploughing eight acres,		$24,00
Furrowing,		1,50
Planting,		8,00
Seed corn,		1,25
Scare crows,		1,00
Cultivating both ways,		3,00
Hoeing,		18,00
Cultivating 2d time,		3,00
Hoeing 2d time,		10,00
Hoeing in rye,		20,00
Cutting stalks,		8,00
Harvesting corn,		40,00
Do. stalks.		2,00
Do. pumpkins,		1,00
Do. beans,		25
		$141,00
Deduct half last hoeing as belonging to rye crop,		10,00
		$131,00
Cr.—By 250 bushels sound corn,	$150,00	
25 do small corn,	12,00	
800 pumpkins,	25,00	
4 tons stalks,	40,00	
Husks and buts,	30,00	
Beans,	2,50	
	$360,00	
Deduct expenses,	131,00	
Profits,		$229,00

My friend selected an acre of meadow ground, which had been planted the year before, and he manured it heavy with good manure from his stable and pig pen, and the whole expense of ploughing, sowing seed, and manuring, calling the manure one dollar a load, was $53,00.

This wheat was the best of any in town; he harvested, and measured it with care, and found he had thirteen and a half bushels.

As wheat has no established price in this place, each one must cypher out the profits for himself.

Perhaps I ought to remark that the season has been favorable for Indian corn, and unfavorable for wheat; but I shall continue my corn experiments from year to year, and hope the sowers of wheat will do the same, and give publicity to the results—it is desirable that every farmer should know what his neighboring farmers are about. Real improvements should be seized upon and put in practice; but we ought to beware of theories until they have been well tested by experiment. The loss of a whole crop to a farmer is a serious matter, therefore if any crop be doubtful he should plant but a part of his field with it. Such as are not able to lose should scatter their chances. My present impression is, that upon sandy land, no crop is so certain, upon an average of many years, as Indian corn. If I find myself mistaken I will tell the public of it.

SYLVANUS BOURNS.

Indian Neck Farm, Nov. 16, 1838.

EARLY LAMBS.

Farmers in this country have, hitherto, in order to avoid the care necessary to rear lambs yeaned as early as January or February, and the less consequent on want of attention, endeavored to hav their lambs dropped at as late a period as could be, and they attain sufficient strength and hardihood to endure the following winter. In this way, with the ordinary mode of treatment, more lambs are saved than would be were they to come at the early period named; but they are not the second year worth as much to the butcher, and their fleece will be lighter than if dropped early. Still, unless more food calculated to cause ewes to give a supply of milk, such as turnips, rowen hay, or other nourishing food, be provided; and the difference in price between early and late lambs is no more considerable than it now is, perhaps the present course is the best. But from the increasing inquiries made in our markets for early lambs; the more general consumption of mutton of all kinds among the people generally; and the better prices that heavy, early lambs, now command, we are induced to believe that with a little precaution, farmers who have flocks of the hardier kinds of sheep may find it for their interest, to make the breeding of early lambs a part of their business. The time required, falls at a period when it is little available as a source of profit in any other way, and might perhaps be made of account in this. To show how the business is managed abroad, we make the following extract from the Quarterly Journal of Agriculture, detailing the process as it is practised extensively in the county of Wicklow, for the Dublin market.

"The flock of the lamb farmer consists almost uniformly of 100 ewes, kept as well as his pastures will admit of. Amongst those eight or ten rams are put in the beginning of June. Many of the ewes will impregnate by the end of July, it being natural to this kind of sheep to take the ram at an early period, and this tendency on their part, becomes periodical; so that much better chance of early lambs is had from being in the habit of breeding them from those untried. If, after this month, any ewes seem not to have been tupped, the anxiety of the farmer to obtain the high prices of the early market, suggests the expedient of hurrying the flock about the barn or a small enclosed yard, till they are considerably heated and fatigued, at which crisis a number of rams are introduced, and the ewes treated in this manner, in most instances, present the farmer, in the month of January, with the expected result of his experiment.

"The lambs at a fortnight old, are separated from the dams, and placed in small pens in the lamb house. This is by some constructed in three apartments; one devided into pens for lambs of different ages, the other two communicating with this, and also with the farm yard; the one to receive the dams of the lambs that are in the pens, the other to receive the dams of those that have been sold off.

"Into these two divisions the ewes, as here distinguished, are respectively driven twice a day. The dams of the lambs sold off; or, as they may be termed, the nurses, are brought out separately, and held for the lambs to suck them. They are then put away, and the lambs are let into the adjoining apartment to their own dams. While the lamb is very young, it is incapable of using much milk, and the ewe will it is likely afford sufficient for its sustenance; but as it increases in strength, assistance from the cow becomes necessary, and,

beginning with a quarter of a pint each lamb, before it becomes sufficiently fat, will come to use more than a pint of cow's milk at a meal, and that twice a day, exclusive of the milk of the ewe. The regular practice is to divide the twenty four hours by four equal periods, and to feed the lambs with ewe's and cow's milk alternately, at intervals of six hours. This for the time requires constant attention, night and morning, and on that the success of the feeding principally depends. This attention must be directed to another object also, as well as their feeding; unless great cleanliness and regular warmth is particularly observed, the lambs will never thrive.

"The best lamb feeders have board floors to their pens, contrived to let all moisture pass through, and be drained away, so that the lambs lie always dry and warm, upon wheat straw, which is preferred to any other for this purpose. At about 6 weeks old, or sooner, they are fit for the butcher, and produce, according to the time of sale, from 20s. to two guineas and a half a piece, (from $4 44 to $11 80.) The lowest prices take place late in the season, when the ewes have plenty of grass, which increases their milk, and renders the assistance of the cow unnecessary; but at the early season, when the ewe's milk would be so valuable, it is unaccountable that some greater exertion is not made to supply them with turnips, or other artificial food, which would preclude the necessity of encroaching upon the dairy, at least to the present extent. The foregoing method, includes all the rules observed by the chief farmers in the lamb trade,—a practice which has caused much wonder, and the success of which has been imputed to such various mysteries, but, except in the contrivance of the barn, which is certainly made use of, the whole is comprised in regularity and cleanliness."—*Genesee Farmer.*

From the Genesee Farmer.

THE MILK SICKNESS, OR

PUKING COMPLAINT.

Mr. Tucker.—I promised, some weeks ago, to give you a brief sketch of the "Milk Sickness, or Puking Complaint," as it is called, that prevails in the West in many places. There never was a disease in any country, where there were so many conflicting opinions respecting the cause. This disease is fixed in the stomach; a fiery burning sensation in the lower region of the stomach, accompanied with a constant desire to puke—the glands are affected; and as the bowels become torpid from the poisonous matter making a lodgment on the stomach and destroying not only the coats of the stomach but affecting all the digestive powers, it is almost next to impossibility, in an advanced state of the disease, to procure a passage from the bowels. The cattle that have been opened present what is called the "Manifold," with its contents as dry as a chip; a part of the substance taken as a nourishment digested, other parts again remaining as when first deposited; the whole region of the stomach having ceased to act! This, in animals produces what is called the "Trembles." The animals may live for weeks in this state, if not entirely overcome; but the attacks, in many instances, are not discernible until there is sufficient action or exercise to produce a circulation of the blood, when the poison diffuses itself throughout the whole system, and soon destroys the animal, and those of the canine or vulture race that prey upon the carcass are destroyed also.

Narrative—The first persons in the West, that fell victims to this dreadful disease, were Mr. William Tompkins, an emigrant from my father's neighborhood, (Harwood county, Va.) and a Mr. Bernard Fowler, brother of Maj. John Fowler, who for many years was the only member of Congress from Kentucky, when that State was entitled to one Representative only. The two persons were neighbors, and lived on Bank Lick Creek, a branch of Licking River, which empties into the Ohio, directly opposite to Cincinnati.—They died about the year 1794 or 5. The disease frequently prevailed about the forks of Licking as the country was settled—on Raven Creek, another branch—on Eagle Creek, a branch of Elkhorn. The next we heard of it was in divers places in the Green River Country, so called, the southern part of Kentucky; frequently in divers other places.

As Ohio began to be settled in 1798, '99, and 1800, up to the years 1826, 7 and 8, this disease made its appearance on the Miamis—on the waters of the Scioto, particularly on some of the branches of Point Creek. Becoming a resident of Ohio in 1806, I discovered that the Rattlesnake Fork of Paint Creek, and the upper part of Big Darby Creek, were places most affected with it. Some places on Deer Creek, particularly within four or five miles west of London—also places on Mad River, vicinity of Springfield and Urbana. It again was found in different settlements towards the Muskingum; not confining itself to the *flat* regions of the Miamis, Scioto and other places, it had fixed itself in the hilly regions of Kentucky, on Licking and its tributary streams, and in like manner in the flatter region of the Green River Country: So it was in Ohio; some portions of the rolling region of country of Hockhocking and of the Muskingum rivers, were afflicted with it also; and it has been subsequently felt in different parts of Indiana and Illinois.

The Cause.—Like others, for many years, my mind was bewildered as to the cause of this dreadful disease. My business leading me to visit every region nearly of the country in Ohio, I felt great sympathy for the afflicted, and an ardent desire to detect the cause. In 1807, I think it was, Col. Robert Rennick, then living on the present site of Springfield, Ohio, an emigrant from the South branch of the Potomac, in Virginia, and a great cattle raiser, began to try experiments. His cattle took it, and he effected a cure by giving to each steer a bottle of whiskey, about a quart. Indeed *Captain Whiskey*, in those days, was almost a *King cure-all.* But his remedy, in some instances, failed. He then turned out his cattle, let them range over the prairie and timber lands, and as the frost had nipped the green herbage, he followed his cattle to the timber lands, where he found them greedily stripping the foliage and browsing on a stubby and running vine: after eating this, and on returning home, the cattle took the "trembles." We have frequently springs running from high banks into large streams, collecting from the savannah's banks, or from beds of vegetable or mineral substances, or the earth, poisonous matter; but this, I was satisfied, was not the cause of what is called the Puking Complaint, or Milk Sickness; for where it prevailed most, there never was purer or more wholesome water issuing from our mother Earth. To Col. Robert Rennick's vine, I then began to direct my attention, and full 25 years were spent in making researches, and trying experiments, and to go into detail would be too tedious and unnecessary. I found it necessary to lay all theory aside, and to go on *facts.*

Facts.—1. About 1816, a man living in Indiana, on the Ohio river, bruised the vine, extracted the juice, gave it to a cat, and it killed it.

2. The vine grows in every region where the Milk Sickness or Puking Complaint prevails. Where the vine is not to be found, there is no disease of this nature. This is a stubborn fact!

3. Calling to see a friend living on Darby Creek, in Ohio, whom I had not seen for twenty years, (Mr. McCloud,) in 1832 or 3, he pointed to his wife and remarked:—"She is my third wife, I am her third husband; and in yon grave yard lie 15 of our families taken off by the dreadful disease, the Puking Complaint!" And do you know the cause, said I. "Yes, we have found it out; it is partly a shrub, which, coming in contact with trees, ascends as a vine. I followed my cattle, found them eating of it, and soon taken with the Complaint, and some unable to reach home." This awful, astounding fact, having before fixed on the vine, led me to make a full disclosure in the papers, which set many doctors, both mineral and steam, by the ears.

4. While the doctors were discussing the subject, and some of them calling my facts in question, a warm friend of mine, John McNeil, esq. of Frankfort, Ross county, Ohio, a very extensive farmer and grazier, determined on satisfying his own mind, sent out his son to purchase the healthiest steer he could find in the neighborhood, and to get a good one, paid thirty dollars for it; he gave the steer the vine, as he informed me; he ate it, and the next morning the steer was found *dead.*

5. Two purchasers of cattle, Messrs. Harold, and Harrod, living in the corners of Clark and Fayette counties, on the head waters of the Little Miami, I think, had purchased about 120 head. The drove was divided, 60 were placed in a meadow that had been kept clear of shrubbery and vines, and 60 put into an adjoining enclosure, taking in some woodland. The cattle were fed on the same hay and watered from the same well—most of the 60 enclosed in the woodland died. It was winter; snow was on the ground; it was discovered that these cattle had eaten the vine down to the very roots! So this was a *stubborn fact.*

6. A man not far from the same vicinity, by the name of Allen, had a horse that broke out of his enclosure, and ran off into the barrens; he trailed him up, found him browsing on the vine, and that he had eaten a considerable quantity of it. Being vexed at the animal, he caught and mounted him, and rode him home at full speed; this heated the blood of the horse, he took the "trembles," and died!

I could still proceed with statements of facts of like nature; but will in place thereof give—

Vouchers.—The following papers a few minutes ago I laid my hands on, by overhauling some old papers. They have been before published in Ohio, but are now taken from the originals:

I hereby certify that my father settled upon the waters of Mad River, about the year 1801—that in harvest the cattle took the 'trembles'—that the country was settled some time before the cattle took the 'trembles'—[range first eaten on]—before this the "Puking Complaint" was not known among the people—that in cases of cattle having the 'trembles' and dying, the manifold of the paunch was dried up—that believing the complaint to be caused by a poison vine, we looked for it, took some of it, and gave it to a calf, and the next morning, (after eating of it,) it took the 'trembles'. My father and myself chewed some, and it caused the water to run from our stomach, and we were seriously affected by it; we did not swallow the juice. No one in the country believed it to be the water that caused the Milk Sickness. The vine described by Mr. Th. S. Hinde is the vine referred to by me.

W. TAYLOR.

Champaign Co. O. Aug. 19. 1833.

We state, that Thomas Parker, a neighbor of ours, from the information given by him, had a cow that, after eating the vine, died. Our father's cattle also died after eating of it. Mr. Schoonmaker and a part of his family died of the Puking Complaint. Mr. S. gave a dog a crock of cream; he ate it and died. The crows, ravens and buzzards that ate the carcasses of the cattle of Mr. Schoonmaker died.—Our brother, T. Taylor, lives at the place—the water is pure and wholesome.

WM. TAYLOR,
S. TAYLOR

Aug. 19. 1833.

I do hereby certify that I lived in Clark county, Ohio, for sixteen years—that I had been uniformly of opinion that the water drank by the cattle was the cause of the Milk Sickness or Puking Complaint. Having been told to the contrary, and that the eating of the poisonous vine produced it, I did not believe it. I then ate a handful; the next day I was attacked with puking, and was sick a month; Dr. Needham of Springfield attended on me, and I recovered. I now live on Lewis' Reserve, Logan county.

JAMES M'MANNA.

August 11, 1833.

Description of the Vine.—1. It grows as a shrub, somewhat resembling a hickory or buckeye bush; when not attached to a tree, grows bunchy or bushy at the top. It is also found clinging to fallen timber, old rotten logs, in wet places, near the edge of ponds, creeks, and hollows of hills, frequently around stumps along the road, and sometimes in pastures or meadows. It has a singular leaf with one or two notches or saw teeth on each side.

2. As a vine when it attaches itself to a tree, it runs up as a creeper to a considerable height, and bears a berry, with a buff or brown coat, in bunches, and is minutely described as a vine affecting the vineyards of the Asiatics, and styled by the Arabs "*The Wolf Grape;*" and by Isaiah, the "Wild grape." I enclose one or two of the leaves for your inspection.

THOS. S. HINDE.

Mt. Carmel, Ill. Sept. 29, 1833.

☞The poison vine referred to uniformly has three leaves on a stem—the poison Ivy *five*, and notched all round. The wild Creeper or Trumpet flower, a long stem and many leaves.

A large majority of the Delegates from the State of Maryland, to the National Silk Convention, assembled at the Masonic Hall in the City of Baltimore, on the 13th of December, 1838.

Luther J. Cox, Esq., was appointed Chairman, and Thos. H. Dawson, Secretary.

The necessity and expediency of forming a State Convention, to meet at Annapolis during the session of the Legislature, was taken into consideration, and on motion it was Resolved, that a State Silk Convention be formed, to meet at the City of Annapolis, on the 3d Tuesday in January next.

Resolved, That the citizens of each county in this State, friendly to the culture of Silk, be requested to hold meetings and appoint, not exceeding 5 delegates, to meet said Convention to be held in the City of Annapolis, at the time mentioned in the foregoing resolutions.

The newspapers of the State are requested to give the above a few insertions.

LUTHER J. COX, Chairman.
Thos. H. Dawson, Secretary.

AGRICULTURAL IMPLEMENTS AND SEED SEORE.

The Subscriber informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, of as good materials, and on as reasonable terms as any in the State His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames—and he challenges its equal in any part of the world. Having an iron foundry attached to my establishment, all orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, of prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reeves' Nursery, near Salem, New Jersey, whose *fruit trees* he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately. J. S. EASTMAN.

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col. N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,
oc 23 tf Fayette, near Calvert st. Baltimore.

THE MARYLAND SILK COMPANY OF BALTIMORE

Offers for sale 25,000 genuine *Morus Multicaulis* trees, 20,000 *Alpin, Canton*, and other varieties.

d 25 L. J. COX, President.

Wm. Prince & Sons will make sales of Trees and Cuttings of the Genuine Chinese Morus Multicaulis, Morus Expansa, Alpine, Brousa, Canton, and other varieties, deliverable to the purchasers at such period in the Spring, as is convenient to them, and will enter into contracts accordingly. Prices and terms for the trees and cuttings will be forwarded to all who may apply for them by mail, as well as prices of silk worm eggs, mulberry seeds, &c. The Multicaulis trees are remarkably vigorous, and as we first imported the genuine tree, purchasers are sure of obtaining the true kind. It is from this cause, and from the great attention paid by them, that the trees they have sold have given universal satisfaction.

Flushing, near New York—Jan. 1. 1m

SILK AGENCY OF BALTIMORE.

The undersigned has opened the Spacious Room, No. 194 Baltimore street, for the purpose of Receiving, Exhibiting, and Selling on Commission all useful and approved articles connected with the growth, production and manufacture of American Silk. This establishment is designed also to concentrate information and improvement on the subject and advancing this great national enterprize. The following are among the articles which will be constantly for sale, viz:

Morus Multicaulis, Canton, Alpine, Asiatic, Brussa and other approved Mulberry Trees, to produce food for Silk Worms.

Cocoons of every variety.
Eggs for producing Silk Worms.
Machinery for Reeling and Manufacturing.
Periodicals and Standard Works for giving information.

jan 1 3t* E. CENTER.

CHINESE MULBERRY TREES.

American Silk Agency, No. 95, Walnut st. Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz: Morus Multicaulis Alpinese, Brussa Multicaulis Seedlings Morus Expansa, Multicaulis Cuttings, Improved Italian Trees, &c. Also, Cuttings from *Norton's Virginia Seedlings*, and Cunningham's Prince Edward Grape Vines. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such articles as they may want without fear of deception. oc 9 tf

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.
One do. six months old.

of the *improved Durham short horn breed*; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three *Devon Bulls*, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Petersville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK FISERT, Manager.

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	7 00	9 50
CORN, yellow	bushel	—	—
White	"	—	—
COTTON, Virginia,	pound	9	11
North Carolina,	"	9¼	11
Upland,	"	9¼	11
Louisiana —— Alabama	"	11¼	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's	"	—	—
Super How. st. from stores	"	8 00	8 12
" " wagon price,	"	7 75	7 75
City Mills, super	"	8 12	8 25
" extra	"	8 50	—
Susquehanna,	"	—	—
Rye,	"	5 50	—
Kiln-dried Meal, in hhds.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholes. red Clover,	bushel.	15 00	—
Kentucky blue	"	—	—
Timothy (herds of the north)	"	3 00	—
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	—
HOGS, on the hoof,	100lb.	8 50	9 00
Slaughtered,		8 00	8 50
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	44	45
PEAS, red eye,	bushel.	—	1 12
Black eye,	"	1 00	1 12
Lady,	"	—	—
PLASTER PARIS, in the stone, cargo,	ton.	4 50	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	88	95
Susquehannah,	"	—	none
TOBACCO, crop, common,	100lbs	4 50	5 00
" brown and red,	"	5 00	6 00
" fine red,	"	9 00	10 00
" wrappery, suitable for segars,	"	10 00	20 00
" yellow and red,	"	10 00	12 00
" good yellow,	"	10 00	14 00
" fine yellow,	"	12 00	15 00
Seconds, as in quality,	"	6 00	—
" ground leaf,	"	7 00	9 00
Virginia,	"	6 00	9 00
Rappahannock,	"	—	—
Kentucky,	"	6 00	8 00
WHEAT, white,	bushel.	1 75	1 78
Red, best	"	1 70	1 75
Maryland	"	1 50	1 70
WHISKEY, 1st pf. in bbls. (scarce)	gallon.	45	—
" in hhds. (scarce)	"	41	—
" wagon price,	"	bbls	40
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 00	—
To Wheeling,	"	2 25	—
		washed.	*unwash*
WOOL, Prime & Saxon Fleeces,	pound.	50 *to* 55	
Full Merino,	"	45 50	
Three fourths Merino,	"	40 45	
One half do.	"	35 40	
Common & one fourth Meri.	"	35 40	
Pulled,	"	30 33	

POTATOES, 60 to 70 cts. a bushel.

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful *fashionable* roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is $75. Applications, *post-paid*, to be made to ED. F. ROBERTS.

Who has also for sale several full bred Devons, males and females. de 2 4t

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured	pound.	15	—
Shoulders, do.	"	14½	—
Middlings, do.	"	14½	—
Assorted, country,	"	13½	—
BUTTER, printed, in lbs. & half lbs.	"	31	37½
Roll,	"	25	31½
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old	each.	5 00	6 00
COWS, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 75	—
CHOP RYE,	"	—	1 60
EGGS,	dozen.	12½	—
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	—
Herrings, salted, No. 1,	"	5 75	—
Mackerel, No. 1, —— No. 2	"	12 50	—
No. 3,	"	—	7 25
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	14	15

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par
Branch at Baltimore,	do
Other Branches,	do
MARYLAND.	
Banks in Baltimore,	par
Hagerstown,	o
Frederick,	do
Westminster,	do
Farmers' Bank of Mary'd,	do
Do. payable at Easton,	do
Salisbury, 1 per ct. dis.	
Cumberland,	par
Millington,	do
DISTRICT.	
Washington, Georgetown, Alexandria,	Banks, ½ p. c.
PENNSYLVANIA.	
Philadelphia,	par
Chambersburg,	¼
Gettysburg	do
Pittsburg,	2½
York,	¼
Other Pennsylvania Bks.	2
Delaware [under $5]	4
Do. [over 5]	1½
Michigan Banks,	10
Canadian do.	10

VIRGINIA.	
Farmers Bank of Virgi.	par
Bank of Virginia,	do
Branch at Fredericksburg,	do
Petersburg,	do
Norfolk,	do
Winchester,	do
Lynchburg,	do
Danville,	do
Bank of Valley, Winch.	par
Branch at Romney,	par
Do. Charlestown,	par
Do. Leesburg,	par
Wheeling Banks,	2½
Ohio Banks, generally	3
New Jersey Banks gen.	3
New York City,	par
New York State,	do ¼
Massachusetts,	1¼a2
Connecticut,	1¼a2
New Hampshire,	1¼a2
Maine,	1¼a2
Rhode Island,	1¼a2
North Carolina,	3a3½
South Carolina,	4a5
Georgia,	5a5½
New Orleans	7a8

BARHAMVILLE INSTITUTE,

With 10,000 *Morus Multicaulis Trees, for sale.*

The establishment now offered for sale, is called Barhamville. It is beautifully and eligibly situated about 2 miles from Columbia, (the capital of S. C.) in a region of country termed the Sand-Hills. The grounds comprehend between 500 and 600 acres; they are well timbered, (chiefly pine and small oak); about one half consist of what is termed bottoms, rendered perfectly dry and tillable, by at least 6000 yards of ditching, most of which measures 5 feet in width by 3½ in depth. There are upwards of 70 acres completely ditched, now ready for being broken up, which I value at $50 per acre.

The Institute buildings are situated upon a high range of Sand-Hills, proverbial for health, insomuch that the neighborhood affords a retreat for many of the families of Columbia during the summer months. It was on that account that the site was selected for the business (a female Boarding School) to which the buildings have been dedicated. The water is excellent, supplied by two pumps—besides which there are two excellent springs.

The centre building is of wood, well plaistered, and neatly finished throughout, and measures 54 feet square, three stories high; the upper room or attic story being 15 feet in height. Beneath this building is an excellent cellar, above ground. The wings attached to the centre building are 100 feet each in length, the one 24 and the other 34 feet in width. The southern wing is of brick, well plastered, two stories high, well finished throughout, having an excellent cellar above ground. The northern wing, recently built, is of wood, ceiled throughout. It is three stories high, with an attic story equal in its area and superior in its height to the three lower stories. The basement story of this wing is of brick.

A mahogany spinal stair-case of superior workmanship, which with other improvements attached, cost upwards of $2500, ascends throughout the centre building.

From the extremity of the brick wing, and at a right angle with it, proceeds a building, (the academic edifice) 134 feet in length by 34 feet in width, two stories high, well ceiled throughout, and having an excellent cellar above ground.

Besides fire-places, the whole establishment, with the exception of the brick building, is warmed by air-furnaces, on the most improved plan, similar to that by which Grace Church and many public and private edifices in Philadelphia are warmed.

The expense of erecting the apparatus, &c. amounted to upwards of $2500.

The area of all the floors in these buildings, is, by measurement, upwards of 100,000 square feet. On the Institute buildings is an insurance for $15,000.

There are also, at a small remove from the main buildings, two residences, cottage-built, neatly finished; the one containing 4, and the other, 2 rooms.

Within 300 yards of the Institute, on an eminence, is the mansion built by me for the late John La Taste, repurchased by me from his family. This is a highly improved residence. The house stands upon brick pillars about 5 1-2 feet from the ground; the four lower and two upper rooms being well finished; out-houses, &c. in good order.

It is unnecessary to say, that the out-buildings of the institute are, in every respect, correspondent to the main building. The garden has been improved at a considerable expense.

With the above establishment, every way fitted for an extensive Silk Factory, may be had 10,000 Morus Multicaulis trees, 500 of which are 6 years old, all of vigorous growth, which, at the present time, will yield upwards of 200,000 cuttings; they are now regularly planted, 12 feet by 12. 100,000 cuttings, of two and three eyes each, are now being set out, well secured from frost by a ground dressing of long manure.

When the intrinsic value and resources of the above establishment are taken into consideration, and when it is recollected that in one year, from the present time, Columbia will be connected with Charleston by a rail-road, now in a vigorous state of progression; when it is, furthermore, recollected, that this rail road is to connect the sea-board with the great north-west, it may be said that the property now offered for sale, presents inducements to individuals or companies, desirous of embarking extensively in the Silk business, unsurpassed by any thing offered in this country.

The buildings, collectively, cost upwards of $60,000, and the lands, with the improvements bestowed upon them, will command at auction $25 per acre, and, as it respects the value of the trees, an estimate can be easily made by reference to the prices they are now commanding in the Northern and Middle states.

I will sell the above at two-thirds of the original cost, on the following terms: one-third cash, and the remaining two-thirds payable in one and two years, with interest from time of sale, mortgage and approved security and policy of insurance assigned.

ELIAS MARKS, M. D.

Barhamville, near Columbia, S. C.

☞ I will dispose of 100,000 cuttings (or 200,000 eyes) each cutting to consist of 2 or 3 eyes, *hermetrically sealed at each end with a composition* of beeswax and rosin. Price 2½ cts. per eye, delivered in *Columbia*. E. M.

de 18 6t

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to this subject. no 20 J. F. CALLAN.